## **EUROPEAN PATENT OFFICE**

## **Patent Abstracts of Japan**



APPLICATION DATE : 08-08-86 APPLICATION NUMBER : 61187629

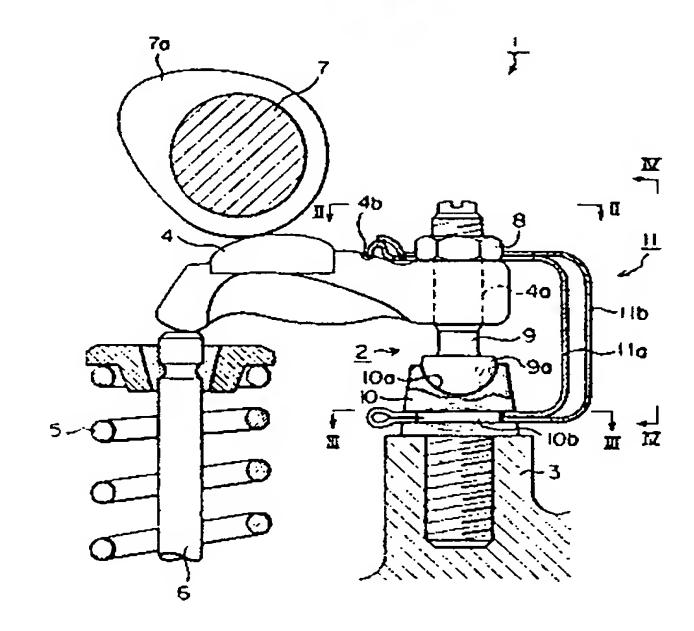
APPLICANT: MAZDA MOTOR CORP;

INVENTOR: OTSUKA MASAHIRO;

INT.CL. : F01L 1/18

TITLE : SWING ARM TYPE TAPPET VALVE

DEVICE



## ABSTRACT:

PURPOSE: To prevent lowering of holding power due to resonant vibration of a spring by making up the spring, which holds elastically a pivot provided on a swing arm with a pivot holder, with a plurality of spring member having respective different proper frequencies.

CONSTITUTION: An intake/exhaust valve 6 is opened and closed by a cam 7a through a swing arm 7. The swing arm 4 swings on the fulcrum of a pivot bearing 2 fixed to one end thereof. The end portion of the pivot bearing 2 has a convex spherical portion 9a which is supported in the concave spherical portion 10a of a pivot holder 10. The pivot 9 and the pivot holder 10 are held elastically by a spring 11. The spring 11 consists of plural spring members 11a and 11b having the respective proper frequencies different from each other. Thereby, at the time, when either one of members 11a and 11b makes vibration with its proper resonant frequency, the spring member makes vibration dumping action, so the whole of the spring does not always make resonant vibration.

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